IN THE SPECIFICATION:

Please replace paragraph **[0019]** with the following paragraph:

[0019] It was unexpectedly and surprising discovered by the inventors herein that depositing silicon carbide materials with an organosilicon compound having the formula $SiH_a(CH_3)_b(C_6H_5)_c$, wherein a is 0 to 3, b is 0 to 3, and c is 1 to 4, under the processing parameters described herein, produced a silicon carbide film having a dielectric constant of less than 4 with improved barrier layer properties, such as an interlayer diffusion resistance of about 100% greater than silicon carbide film produced by commercially available alkylsilane precursors, such as trimethylsilane (TMS). This is unexpected because it has been observed that phenyl groups increase the porosity of the deposited dielectric material, thereby reducing the interlayer diffusion resistance of the deposited dielectric material. The barrier layers are preferably deposited adjacent dielectric layers comprising silicon, oxygen, and carbon, which have a dielectric layer of less than about 3.

Please replace paragraph **[0024]** with the following paragraph:

[0024] The barrier layer may further be doped with oxygen, nitrogen, boron, or phosphorous to reduce the dielectric constant of the deposited material. A ratio of dopant to organosilicon compound in the processing gas is between about 1:5 or greater, such as between about 1:5 and about 1:100. Phosphorus and/or boron doping of the low k silicon carbide layer may be performed by introducing phosphine (PH_3) or borane (BH_3), or borane derivative thereof, such as diborane (B_2H_6), into the chamber during the deposition process.